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Application No.: 10/820,601

Docket No.: JCLA12197

Discussion of Office Action Rejections

The Office Action rejected claims 9 and 10 under 35 U.S.C. 103(a), as being unpatentable over Komatsu (U.S. 6,380,053).

Applicant respectfully traverses this rejection and submits that Komatsu (U.S. 6,380,053) is legally deficient to render claim 9 unpatentable. As stated claim 9 recites:

Claim 9. A semiconductor device, comprising:

a substrate;

a gate structure on said substrate, said gate structure including a gate dielectric layer on said substrate and a gate conductive layer on said gate dielectric layer;

an oxide spacer on a sidewall of said gate structure;

a spacer on said oxide spacer;

a source/drain region in said substrate besides said gate structure and said spacer; and

an offset oxide layer on said substrate and said source/drain region, said offset oxide layer having a bottom surface below a bottom surface of said gate dielectric layer.

(Emphasis Added) Applicants submit that the claim patently defines over the prior art of record, for at least the reason that the prior arts fail to disclose at least these elements emphasized above.

More specifically, Komatsu fails to teach or suggest leaving the first sidewall unit 22A and the second sidewall unit 22B on the substrate 10 while the offset oxide layer is formed in the substrate 10. Instead, Komatsu emphasizes that, at beginning of the step 330 stated in cited art, the second sidewall unit 22B and the first sidewall unit 22A are individually removed (col. 12, lines 57-63, col. 12, line 66-col.13, line 2 and col. 13, lines 40-44). Komatsu further states that, after the second sidewall unit 22B is removed, the first extension region 25A is formed in a portion of the substrate under which the second sidewall unit 22B was located at (col.13, lines 5-

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10, Fig. 6B). Similarly, after the first sidewall unit 22A is removed, the second extension region 25B is formed in a portion of the substrate under which the first sidewall unit 22A was located at (col. 13, lines 47-52). Apparently, in the cited art, in order to form the first and the second extension regions 25A and 25B, it is necessary to remove the first and the second sidewall units 22A and 22B. Hence, the result of the semiconductor device according to the cited art does not possess the sidewall unit on the sidewall of the gate electrode 21.

Although Komatsu mentions the formation of the silicon oxide layer on the surface of the substrate (col. 13, lines 2-5 and col. 13, lines 44-47), Komatsu still fails to teach or suggest that the bottom surface of the silicon oxide layer is lower than that of the gate insulating layer 20. Furthermore, Komatsu emphasizes that the silicon oxide layer is formed after the first and the second sidewall units 22A and 22B are stripped away respectively. Hence, the result structure of the semiconductor device as a whole (shown in Fig. 7B) is different from that of the present invention.

Therefore, even people skilled in the art would not manufacture a semiconductor device with the structure the same as that of the present invention by referring to Komatsu's disclosure since Komatsu obviously teaches away from the present invention.

Hence, Applicants respectfully submit that Komatsu fails to render claim 9 unpatentable. Claim 10, which depend from claim 9, are also patentable over Komatsu, at least because of their dependency from an allowable base claim. Applicants respectfully assert that these claims are in condition for allowance. Thus, reconsideration and withdrawal of this rejection are respectively requested.

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The Office Action rejected claims 11-14 under 35 U.S.C. 103(a) as being unpatentable over Komatsu (U.S. 6,380,053) in view of Liaw (U.S. 6,448,140).

Since claims 11-14 are dependent claims which further define the invention recited in claim 9, Applicants respectfully assert that these claims also are in condition for allowance according to the same reasons as discussed above for the rejection 103. Thus, reconsideration and withdrawal of this rejection are respectively requested.